

Remarks

Responsive to the final Office Action mailed June 13, 2006, Applicants provide the remarks herein. Reexamination and allowance of the subject application are respectfully requested.

Applicants thank the Examiner for taking the time to conduct the telephonic interview on November 16, 2006.

Independent claim 13, and claim 17 depending thereupon, have been cancelled rendering all objections to, and rejections of, moot.

Rejections Under 35 USC §112

Claims 4, 6, 12-17 were rejected under 35 USC §112, first paragraph. As noted above, claims 13 and 17 have been cancelled herein, rendering the rejection thereof moot.

In part, the claims were rejected on the grounds that the relationship between the number of recesses and the number of shaft portions introduces new matter. Particularly, in lines 8 and 9 of claim 12, the phrase “said recess” was understood to imply only a single recess, which was asserted to be inconsistent with the disclosure of a recess near each of the three disclosed shaft portions, and to be inconsistent with the limitation that a recess be positioned between said first and second ends of each shaft portion. Claim 12 has been amended herein to more clearly recite “a recess in said insert positioned between said first and second ends of each said shaft portion to thereby provide a plurality of recesses, each said recess accommodating a connecting means for securing said insert to a portion of an internal combustion engine” (Emphasis added). As amended, claim 12 now requires a plurality of recesses with one recess between the first and second ends of each of the plurality of shaft portions. The claimed relationship between the number of shaft portions and the number of recesses is now believed to be in agreement with the disclosure.

Independent claim 12 was also objected to because, in the final line, it was found to be unclear if the recitation “the shaft portion” is intended to encompass the three disclosed shaft portions between the four disclosed control elements. As amended herein, claim 12 recites, in part, “means for mounting each of the shaft portions rotatably with respect to the openings, and

means operable to fix each of two neighboring control elements in torsionally stiff relationship to the first and second end of the respective shaft portion between each of said two neighboring control elements.” As amended, claim 12 is believed to clearly recite that each two adjacent, or neighboring, control elements are fixed to the ends of a respective shaft portion. Accordingly, the recited structure clearly applies to each of the claimed plurality of shaft portions, one of which is disposed between each two neighboring control elements.

Support for the foregoing amendments can be found, e.g., in FIGS. 1 and 2, and in paragraphs [0031]-[0035] of the application as published. Accordingly, no new matter is believed entered. Applicants respectfully request withdrawal of the rejection under 35 USC §112, first paragraph, in view of the remarks and amendments herein.

Claims 4, 6, 12, and 14-17 were also rejected under 35 USC §112, second paragraph. Particularly, the claims were rejected for the asserted reason that the relationship between the number of recesses and the number of shaft portions is vague. As discussed above, independent claim 12 has been to more clearly recite a plurality of recesses, with one of the plurality recesses “positioned between the first and second ends of each said shaft portion.” This amendment is believed to harmonize the number of recesses and the number of shaft portions.

Also, as discussed above, claim 12 has been amended to more clearly indicate that each of the plurality of shaft portions is disposed between two neighboring control elements. Specifically, as amended herein, claim 12 recites, in relevant part, “means for mounting each of the shaft portions rotatably with respect to the openings, and means operable to fix each of two neighboring control elements in torsionally stiff relationship to the first and second end of the respective shaft portion between each of said two neighboring control elements.” (Emphasis added)

As stated above, support for the amendments to independent claim 12 can be found, for example, in paragraph [0031]-[0035] and FIGS. 1-2 of the application as published. Therefore, no new matter is believed entered by these amendments. Withdrawal of the rejection under 35 USC §112, second paragraph, is respectfully requested in view of the remarks and amendments herein.

Rejections Under 35 USC §102

Claims 12 and 16 were rejected under 35 USC §102(b) as being anticipated by Mayer et al. (US Patent No. 5,996,549). This rejection is overcome for the following reasons.

Independent claim 12 has been amended to more clearly define the structure of the claimed insert. Support for these amendments may be found, for example, in FIGS. 1 and 2 and in paragraphs [0031]-[0035] of the application as published.

In amended claim 12, Applicants claim:

12. An insert comprising:
a plurality of openings arranged in a row, each fitted with a flap device for influencing the flow cross-section in said plurality of openings wherein each flap device comprises a control element arranged in each opening,
a plurality of shaft portions, one said shaft portion between each two neighboring control elements, each said plurality of shaft portions having a first and second end and each of said plurality of shaft portions comprising a cranked configuration in a region between the first and second ends,
a recess in said insert positioned between said first and second ends of each said shaft portion to thereby provide a plurality of recesses, each said recess accommodating a connecting means for securing said insert to a portion of an internal combustion engine, and
means for mounting each of the shaft portions rotatably with respect to the openings, and means operable to fix each of two neighboring control elements in torsionally stiff relationship to the first and second end of the respective shaft portion between each of said two neighboring control elements. (Emphasis added)

In contrast to the requirements of independent claim 12, Mayer et al. teach an arrangement including four control flaps (20-26), which may be pivoted by a single, common pivot axle (30) having a single cranked featured between the middle two control flaps (22, 24). As such, Mayer et al. do not teach, or even suggest, a separate shaft portion between each two neighboring control elements, in which each shaft portion includes a cranked configuration. Regarding the recited “cranked configuration,” it is noted that in the context of the present application the term “cranked configuration” clearly refers the physical shape of each of the shaft portions. See, e.g., paragraph [0011]-[0013], [0035, and FIGS. 1-3. Additionally, Mayer et al.

have not even been asserted to teach, or suggest, “a recess positioned between said first and second ends of each shaft portion.”

In view of the remarks and amendments herein, Applicants respectfully request that the rejection of claims 12 and 16 as anticipated by Mayer et al. be withdrawn.

Independent claim 12, and 16 depending thereupon, were also rejected under 35 USC §102(b) as being anticipated by Suzuki et al. (US Patent No. 5,005,533). This rejection is overcome for the following reasons.

As indicated above, as amended herein independent claim 12 requires, *inter alia*, a body in the form of an insert, in which the insert includes a plurality of openings. Claim 12 further requires a plurality of shaft portions, each one of the shaft portions including a cranked configuration between a first and second end of each of the shaft portions. Each of the plurality of shaft portions is fixed to two neighboring control elements associated with respective opening in the insert. Additionally, claim 12 recites a plurality of recesses in the insert, with one recess being positioned between the first and second ends of each of the plurality of shaft portions.

Contrary to the requirements of claim 12, Suzuki teaches a group of individual throttle bodies (8) connected to an intake port (7) by respective rubber mounts (9), as shown, e.g., in FIGS. 3 and 4. The individual throttle bodies (8) are connected to each other by a bracket (11). See, e.g., Col. 3, l. 33-35, and FIG. 2. In view of the foregoing, clearly Suzuki teaches a plurality of individual throttle bodies (8), each having a throttle passage (8a), rather than a single insert having a plurality of openings arranged in a row, as required by independent claim 12.

Furthermore, referring, for example, to FIG. 1 and Col. 3, l. 36-39, the arrangement of throttle bodies according to Suzuki includes a throttle valve (12) in the throttle passage (8a) of each of the respective throttle bodies (8). The throttle valves (12) are each supported on a throttle shaft (13), and the two individual shafts (13) of the two throttle bodies (8) are connected by a link (14). Suzuki, therefore, teaches two separate throttle bodies each with a separate throttle valve and each with a separate throttle shaft, with the two separate throttle shafts being connected by a linkage. As such, Suzuki also does not teach, or even suggest, a plurality of shaft portions, with each of the individual shaft portions coupled to two neighboring control elements at respective first and second ends of each individual shaft portion. Suzuki also does not teach

that each individual shaft portions, of the claimed plurality of shaft portions, includes a cranked configuration between the first and second ends of the shaft portion.

Finally, in rejecting independent claim 12 as being anticipated by Suzuki, it was asserted that the claimed recesses may be read as either bolt holes or the recess between the housing structure. The subject feature of claim 12 has been amended to more clearly recite that a recess is provided in the insert between the first and second ends of each of the plurality of shaft portions to thereby provide a plurality of recesses in the insert. Additionally, claim 12 has been amended to clarify the recesses as accommodating a connecting means for securing the insert to a portion of an internal combustion engine. Accordingly, claim 12 not only requires a plurality of recesses, but further requires that one such recess be disposed in a position in the insert that is between the first and second ends of each one of the plurality of shaft portions.

The asserted bolt holes or space between the individual throttle bodies does not satisfy the claimed plurality of recesses, each being positioned between first and second ends of a shaft portion and accommodating connecting means for securing the insert to an internal combustion engine. Furthermore, at column 3, lines 26-28, Suzuki teaches that the throttle bodies (8) are connected to an intake port of an engine through the rubber mounts (9). Accordingly, in addition to the other distinctions, the asserted recesses do not accommodate connecting means for securing the insert to the internal combustion engine. The throttle bodies, therefore, are not secured to an internal combustion engine via connecting means accommodated by a recess, but rather by the rubber mounts, as shown in FIGS. 3 and 4.

In view of the foregoing, Applicants respectfully submit that Suzuki fails to teach, or even suggest every aspect of independent claim 12, or of claim 16 depending thereupon. Withdrawal of this rejection is, therefore, respectfully requested.

Rejections Under 35 USC §103

Claims 4, 12, and 14-16 were rejected under 35 USC §103(a) as being obvious over Mayer et al. in view of Hatton (US Patent No. 6,135,418). The further consideration of Hatton has been asserted to provide a teaching of methods for connecting a control element to a shaft. Without addressing these particular asserted teachings of Hatton, Applicants respectfully submit that Hatton does not, and has not been asserted to, remedy the deficiencies of Mayer et al. with

respect to amended independent claim 12 discussed at length above. Applicants respectfully request that the rejection of claims 4, 12, and 14-16 be withdrawn upon consideration of the amendments to independent claim 12 and the differences between these amended claim and Mayer et al. detailed above.

Claims 6, 12, and 16 were rejected under 35 USC §103(a) as being obvious over Mayer et al. in view of Pearson et al. (US Patent No. 5,374,032). Similar to Hatton, discussed above, Pearson et al. are relied upon as teaching a flap device with a control element bearing against a flattened portion of a shaft. Again, without addressing these asserted teachings, Pearson et al. has not been asserted to, and does not appear to, remedy the deficiencies in Mayer et al. with respect to independent claim 12, which are discussed above. Accordingly, the combined teachings of Mayer et al. and Pearson et al. are insufficient to render independent claim 12, or claims 6 or 16 depending upon claim 12, obvious. Withdrawal of this rejection is respectfully requested.

Claims 4, 12, and 14-16 were rejected under 35 USC §103(a) as being obvious over Suzuki et al. in view of Hatton. Similar to the previous obviousness rejection utilizing the teachings of Hatton, it is respectfully submitted that Hatton does not remedy the deficiencies of Suzuki et al. with respect to independent claim 12. As such, the combined teachings of Suzuki et al. and Hatton do not teach, or even suggest, every limitation of independent claim 12, or claims 4 and 14-16 depending upon claim 12. Withdrawal of this rejection is accordingly requested.

Claims 6, 12, and 15-16 were rejected under 35 USC §103(a) as being obvious over Suzuki et al. in view of Pearson et al. Also as above, Pearson et al. are asserted to teach a flap device with a control element bearing against a flattened portion of a shaft. Without addressing the particular asserted teachings, Pearson et al. has not been asserted to, and does not appear to, remedy the deficiencies in Suzuki et al. with respect to independent claim 12. The combined teachings of Suzuki et al. and Pearson et al. are insufficient to render independent claim 12, or claims 6 and 15-16 depending upon claim 12, obvious. Withdrawal of this rejection is respectfully requested.

Having overcome all of the outstanding rejections it is respectfully submitted that the application is now in condition for allowance. Early and favorable action is respectfully solicited.

In the event of any fee deficiencies, or that additional fees are payable, please charge our Deposit Account No. 50-2121 as necessary.

Respectfully submitted,

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